

SANDVIK 6RA11 BILLETS

DATASHEET

Sandvik 6RA11 is an austenitic stainless free-machining steel with addition of sulphur.

STANDARDS

ASTM: 303

UNS: S30300

EN Number: 1.4305

W.Nr.: 1.4305

Product standards

- EN 10088-3

ASTM A-314

Certificates

Status according to EN 10 204 3.1

CHEMICAL COMPOSITION (NOMINAL) %

of Carlon Strange Strange	Si	Mn	P	S of god god Cr	Mi Statement Statement St
0.05	0.4	1.8	≤0.045	0.3	" 9" ghanner ganner gr

FORMS OF SUPPLY

Sizes and tolerances

Round-cornered square, as well as round billets, are produced in a wide range of sizes according to the following tables. Larger sizes offered on request.

Surface conditions Square billets

Unground, spot ground or fully ground condition.

Round billets

Peel turned or black condition.

Square billets

	Size															Tolera	nce					Length				
Stall.	mm	The Tree are	Status,	er Staffing	Status.	Stelled Fred Par	Station	Straffing of	a Status	. Station	a Status	Status.	Skafner.	Status.	ar Shefter	mm	Steiner	atelini Steles	ar Station	Staling	West to see	green mg between green	grafinsi Grafinsi	States in	Ske Tres and	- Sit
J. Traffic	80	S.Keifnar.	Skalinas	Station.	Station	Stalian	Skeline	Shellad.	Skelinger	Station	Skeling	Status	& testine.	Straffing!	Stration's	+/-2	Straffes.	Status	Station	Stellor	Skallada	4 - 6.3	Status	Sifestor	G. Kee Tree and	at at
Zifed Iv	100,	114	1, 12	26, 1	40, ⁻	150	Skalling	@KerTing"	@Har Timber	Status	S. Keiling.	Stelles	S. Kalina	S. Fre I've	S. Feeting's	+/-3	Startus.	Status.	Stello:	Station	S. Keiling	4 - 6.3	S. Fee Trees	Sifer Treasur	S. Kee Triage	S.V

Square billets

(Treat	Size	Tolerance	Length
STA.	mm	mm ^{3f} , ^{3f} , ^{3f} , ^{3f} , ^{3f} , ^{3f} , ^{3f}	m ³
Street.	160, 180, 195,200	+1-4	4 - 6.3
(Tro	>200 - 350	+/-5	3 - 5.3

Sizes and tolerances apply to the rolled/forged condition.

Peel turned round billets

Sites	Size / / / / / / / /	Tolerance
Tref	mm / / / / / / / / / / / /	mm/ / / / / / m/ / / / /
Cited	75 - 200 (5 mm interval)	+/-1 max 10
	>200 -450	+/-3

Unground round billets

Size	Tolerance	Length
mm	mm	m ³
77 - 112 (5 mm interval)	+/-2	max 10
124, 134	+/-2	max 10
127, 147, 157	+/-2	max 10
142, 152, 163	+/-2	max 10
168, 178, 188	+/-2	max 10
183, 193	+/-2	max 10 gdd gdd gdd g

Other products

Hollow bar

- Welding wire
- Covered electrodes

MECHANICAL PROPERTIES

Testing is performed on separately solution annealed and quenched test piece.

The following figures apply on material in the solution annealed and quenched condition.

At 20°C (68°F)

Metric units

Shering.	Proof strength		Tensile strength	Elong	Contr.	HB of street
Giteal .	Rp0.2a)	Rp1.0a)	Rm	Ab)	Z string string string	The state of the s
Gter.	MPa	MPa	MPa	%	%	Steel Steel Steel Steel Steel
Site.	a Tubun Tubun Tubun Sh	trades trades trades trades		The State of the S	The State State State State	approx.
STORY.	≥205	≥240	515-690	≥35	≥50	170

Imperial units

Imperial units

Proofstrength		Tensile strength	Elong	Contr.	HB Start Start Start
Rp0.2a)	Rp1.0a)	Rm Stranger	Аь)	Z Z	State State State State State State State
ksi	ksi	ksi	%	%	
and the second s	region and region and region and region and		authoris authoris authoris authoris	Comment and the second and the secon	approx.
≥29.5	≥35	74.5-100	≥35	≥50	170

¹ MPa = 1 N/mm²

Disclaimer: Recommendations are for guidance only, and the suitability of a material for a specific application can be confirmed only when we know the actual service conditions. Continuous development may necessitate changes in technical data without notice. This datasheet is only valid for Sandvik materials.



a) Rp0.2 and Rp1.0 corresponds to 0.2% offset and 1.0% offset yield strength, respectively. b) Based on L0 = 5.65√S0 ,where L0 is the original gauge length and S0 the original cross-section area